

Sup Jan 27, 2017

Work Order ID 154687

154687

Page 1

Monday, December 19, 2016 1:56:59 PM

Item ID: D4634-041 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Fwd, Center Ceiling Panel Assembly
Start Date: 1/3/2017 Start Qty: 1.00 *1* Cust Item ID:
Required Date: 1/17/2017 Req'd Qty: 1.00 *1* Customer:
Reference:

Approvals: Process Plan: LB Date: 1/12/20 Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4634	G								

100

0.00

100

HandThermo

Hand Finishing Thermoforming

Memo

Pick Kit

0.00

DAS
6
9-89

JAN 12 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

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Page 2

Item ID: D4634-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
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Start Date: 1/3/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 1/17/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110		0.00							
110									
Small Fab									
Small Fab									
	Memo	0.16							
	BEFORE INTALLING D4728-051, APPLY A 3/16" SEEM OF PLASTIC- WELD 2 ON TOTAL LENGHT OF PART ON EANCH SIDE OF LIGHT, LET DRY FOR ONE HOUR PLASTIC-WELD 2 BATCH: <u>135436</u>								
	1- Assemble as per Dwg D4634-041								
	2- install No Smoking & seat belt symbols								
	3- Install led lights								
	4- Install Air valves								
	5-Install Wiring Harness								
	5-Install wiring harness								
120	QC5- Inspect part completeness to step on W/O	0.00							
120									
QC									
Quality Control	Memo	0.00							

SMB
17/1/25

D 17-01-25

DAS
9
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER : ☐					

154687

Monday, December 19, 2016 1:56:59 PM

N900040100

Setup **Start** ***NS1***

Stop *NS2*

Stop *NS2*

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Stop *NR2*

**Insp.
Stamp**

0.00

0.00
ppp15468
0.00

0.00

Memo

Smb
17/1/24

0.00

DAS
21
9-89

Memo

0.02

Quality Control

_____ JAN 26 2017 _____

DAS 21 9-89 JAN 26 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

Picklist Print

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3

Work Order ID: 154687

154687

Parent Item: D4634-041

D4634-041

Parent Item Name: Fwd, Center Ceiling Panel Assembly

Start Date: 1/3/2017

Required Date: 1/17/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev. A 12/08/09 New Issue DL
12/11/08 Document release DL VERIFIED BY:JLM
Dwg Update DL verf: DD
DL
DL
DL
IPP Rev B
IPP Rev C 13/07/09
IPP Rev D Dwg Update 13/12/23
IPP REV E Dwg update 14/01/09
IPP Rev F Dwg. update 14/02/03
IPP Rev G Dwg. Update 15/01/27 DL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4652-5 *D4652-5* Air Valve, 1.25 Id Disk Type		Manufactured	No			100	Each	0.0000	2	2			Smb
D4743-1 *D4743-1* Speaker Grill		Manufactured	No			100	Each	20.0000	2	2			
				<u>Location</u>				<u>Loc Qty</u>					
				MF005				20					
				149065				20					
MS21044-N08 *MS21044-N08* Nut		Purchased	No			100	Each	34.0000	8	8		JAN 13 2017	DAS 6 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				ST302				34					
				m131452				34					
MS24693-BB50 *MS24693-BB50* SCREW		Purchased	No			100	Each	117.0000	8	8		JAN 12 2017	DAS 6 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				ST288				117					
				m130207				117					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Description Work Order Deviation				Disposition																																																													
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Work Order ID: 154687

154687

Parent Item: D4634-041

D4634-041

Parent Item Name: Fwd, Center Ceiling Panel Assembly

Start Date: 1/3/2017

Required Date: 1/17/2017

Start Qty: 1.00

Required Qty: 1.00

NAS1149DN832J

Purchased

No

100

Each

1,682.000

8

8

NAS1149DN832.J

Washer

**

DAS
6
9-89

JAN 12 2017

Location

Loc Qty

Loc Code

ST264

1682

M135297

1682

D4634-141

Manufactured

No

100

Each

0.0000

1

1

D4634-141 ✓

Fwd, Center Ceiling Replacement Panel Assembly

**

1547B

Sms

D4646-1

Manufactured

No

100

Each

23.0000

2

2

D4646-1

Plenum Cap Assembly

**

JAN 13 2017

Location

Loc Qty

Loc Code

MF009

23

125003

11

152626

12

D4728-047

Manufactured

No

100

Each

19.0000

1

1

D4728-047 ✓

Advisory Light, Fwd

**

JAN 13 2017

Location

Loc Qty

Loc Code

MF003

2

117929

2

over001

17

124732

17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
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Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
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Picklist Print

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Work Order ID: 154687

154687

Parent Item: D4634-041

D4634-041

Parent Item Name: Fwd, Center Ceiling Panel Assembly

Start Date: 1/3/2017

Required Date: 1/17/2017

Start Qty: 1.00

Required Qty: 1.00

D4728-051 Manufactured No

100 Each 15.0000 1 1

D4728-051 ✓

Cabin Lights #1

**

JAN 13 2017

DAS 6 9-89

Location

Loc Qty

Loc Code

MF001

4

122713

4

over001

11

122713

11

PLT1.5M-M Purchased No

100 Each 2,735.000 7 7

PI T1 5M-M

Tie Wrap

**

DAS 6 9-89

JAN 12 2017

Location

Loc Qty

Loc Code

ST585

2735

m129712

2735

50-009-2 Purchased No

100 Each 83.0000 1 1

50-009-2

Grommet

**

DAS 6 9-89

JAN 12 2017

Location

Loc Qty

Loc Code

ST582

83

m131501

23

m135442

60

2351-20-27-C3C 2351-20-27-Z3CT Purchased No

100 Each 55.0000 1 1

2351-20-27-C3C

STUD

**

DAS 6 9-89

JAN 12 2017

Location

Loc Qty

Loc Code

ST579

55

m128068

11

m130318

44

Monday, December 19, 2016 1:57:05 PM

Shop Packet Print

Page 3

DQA: _____ Date: _____

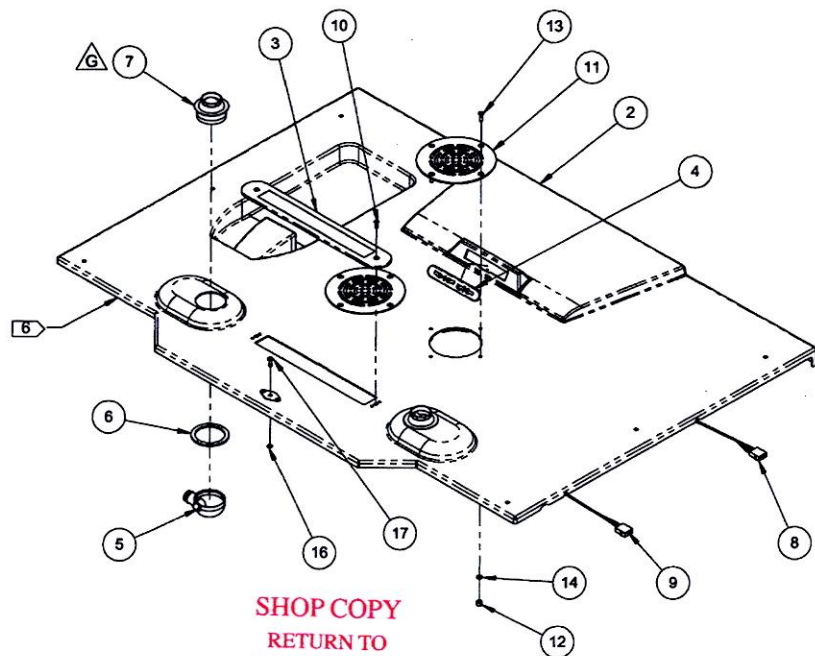


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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : _____							



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 154687

D4634-041 FWD, CENTER CEILING PANEL ASSY

RELEASED

2015 JAN 26

ECN 14-634 4P

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.4, ON SMOOTH SIDE
- 7) WEIGHT: 7.0 lbs
- 8) INSTALL D4728-047/-051 WIRE HARNESS PER QSI 048

ITEM NO.	QTY. -041	P/N	DESCRIPTION
1	X	D4634-041	FWD, CENTER CEILING PANEL ASSY
2	1	D4634-141	FWD, CENTER CEILING REPLACEMENT PANEL ASSY
3	1	D4638-1 (REF)	LED LIGHT (REF PART OF D4728-051)
4	1	D4645-1 (REF)	NO SMOKING & FASTEN BELT LIGHT (PART OF D4728-047)
5	2	D4646-1	PLENUM CAP ASSEMBLY
6	2	D4652-3 (REF)	MOUNTING NUT (PART OF D4652-5)
7	2	D4652-5	AIR VALVE, 1.16 ID DISK TYPE
8	1	D4728-047	ADVISORY LIGHT (FWD) HARNESS ASSEMBLY
9	1	D4728-051	CABIN LIGHT #1 HARNESS ASSEMBLY
10	2	N/A (REF)	SCREW (PART OF D4638-1)
11	2	D4743-1	SPEAKER GRILL
12	8	MS21044-N08	NUT, SELF-LOCKING
13	8	MS24693-BB50	SCREW, CSK 100°
14	8	NAS1149DN832J	WASHER
15	7	PLT1.5M-M	TIE-WRAP (OR PLT1.5M-C)
16	1	50-009-2	GROMMET
17	1	2351-20-27-C3C	DZUS STUD, OVAL HEAD

G	D4652-5 WAS D4652-1 (ZN D4-1, D4-3, D4-5); 10.28 WAS 10.20 (ZN B6-10, B5-12, B5-14); TIE-WRAP & MOUNTING PAD QTY CHANGE; MOUNTING PAD EDGE DISTANCE CHANGE	RF	14.11.28
F	REVISE BOM (ZN D4-7); ADD DIM (ZN B8-9); 10.20 WAS 10.05 (ZN B8-10, B5-12, B5-14); ADD DETAIL V (ZN C4-10, B4-12, C4-14, A4-16); CHANGE PROTRUDE SECTION DIMS TO REF (ZN C7-10, C7-12, C7-14)	RF	14.02.03
E	REVISED BOM (ZN C4-1, C4-3, D4-5, C4-7, C4-8, C4-9); ADDED NOTE 11) (ZN D5-7, A8-7, D5-8, A8-8, D7-9, A8-9); 3.70 WAS 3.83 (ZN C6-11); 1.88 WAS 2.00 (ZN D7-13); 6.13 WAS 6.25 (ZN B8-15); REVISE DETAIL B (ZN A8-16)	RF	14.01.09
D	ADDED PLT1.5M-M (ZN C4-5, C6-9); D5021-1 (ZN D4-7, D5-7); D5021-3 (ZN D4-8, D5-8); D5021-5 (ZN D4-9, B7-9); MPNY-750S-9-C (ZN D4-9, B7-9); Ø 0.129 (ZN B4-11, B4-13); DETAIL "U" (ZN C2-17); 3.83 WAS 3.87 (ZN C6-11); 2.00 WAS 2.02 (ZN D6-13); REVISE NOTE 8) & 10) (ZN A8-7, A8-8, A8-9); & NOTE 11) (ZN A8-10, A8-12, A8-14); 3.80 WAS 3.84 (ZN D4-17, B8-17); REMOVED D4634-7/-041/-043/-045/-047, D4647-3/-7/-8; DIMENSION SHIFTED DUE ADDING D5021-1/-3/-5; Ø 0.250 WAS Ø 0.208 (ZN D6-11, C3-13 & D6-15)	RF	13.12.09
C	REVISE GENERAL NOTES (ZN A8-7, A8-8, A8-9) & BOM (ZN D4-1, D4-3, D4-5, D4-7, D4-8); Ø 0.208 WAS Ø 0.207 (ZN D6-11, C3-13, C6-15) ADD DIM. (ZN B6-7, B7-7, D7-8, & D6-8)	RF	13.06.18
B	ADDED D4634-141/-143/-145 (ZN B4-7, B4-8, B4-9); REVISE D4634-041/-042/-043/-044 PART LIST & GENERAL NOTES; ADD DETAILS R,S,T SHT 10, 12, 14, 16, 17	RF	12.11.30
A	NEW ISSUE	RF	12.07.25
REV.	DESCRIPTION	BY	DATE

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AK	DRAWING NO.	REV. G
MFG. APPR.	DL	D4634	SHEET 1 OF 17
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CENTER CEILING PANELS	NTS
DATE	14.11.28	COPYRIGHT © 2012 BY DART AEROSPACE LTD	
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DQA: _____ Date: _____



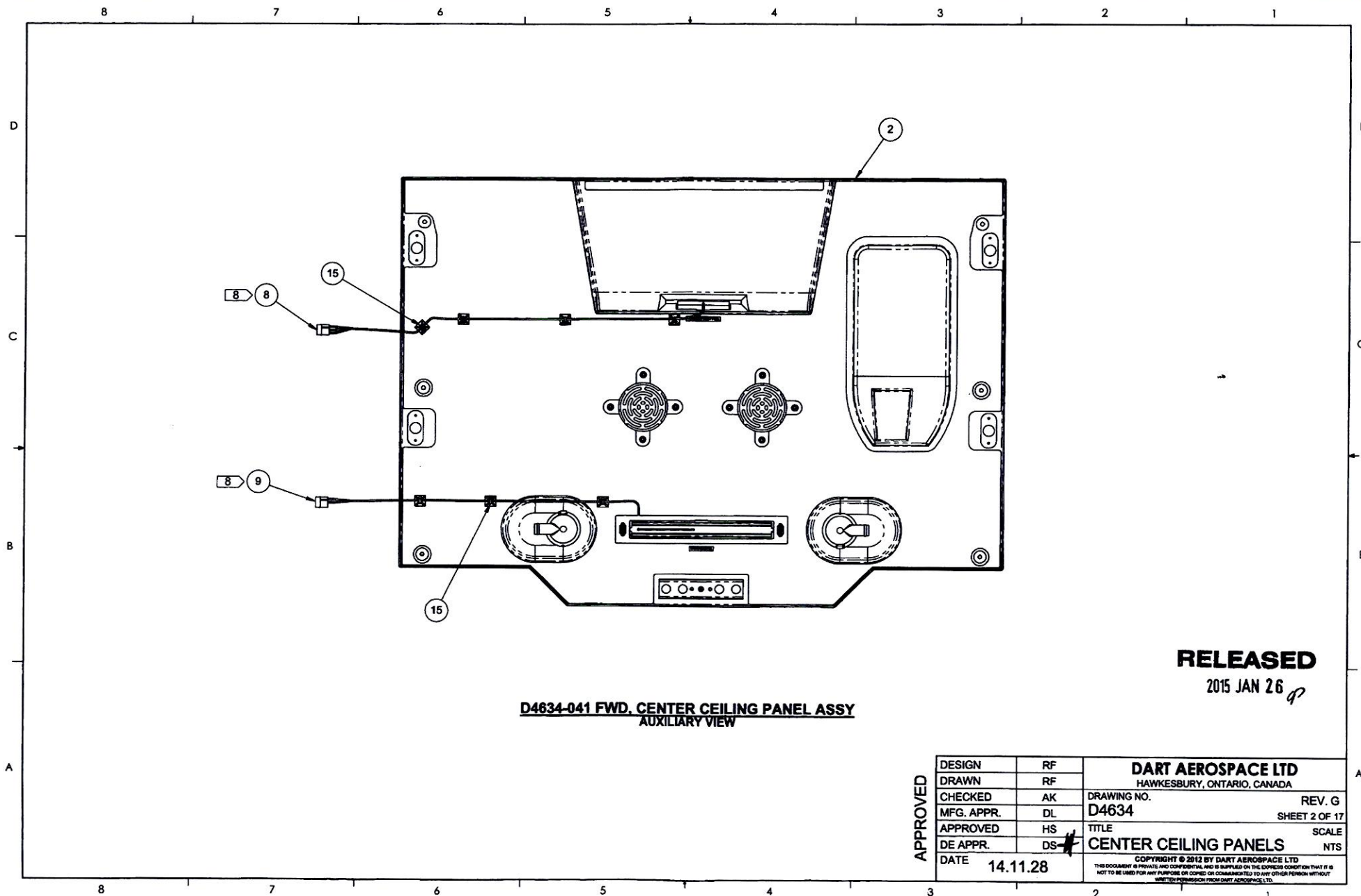
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						



D4634-041 FWD, CENTER CEILING PANEL ASSY
AUXILIARY VIEW

RELEASED

2015 JAN 26 *g*

APPROVED

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	AK	DRAWING NO.	REV. G
MFG. APPR.	DL	D4634	SHEET 2 OF 17
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CENTER CEILING PANELS	NTS
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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Daryl Leger

From: David Shepherd
Sent: Thursday, May 14, 2015 12:35 PM
To: Nigel Forbes; Bill Beckett
Cc: Roberto Fuentes; Linda Lacelle; Mario Poulin; Daryl Leger; Harvey Siemens
Subject: RE: 139 Ceilings Deviation

Nigel,

Thanks for the clarification. I have a much better understanding of what happened here. My assumption had been that we were holding off ordering parts until the newer, cheaper parts were approved so that we could reduce our costs. There is certainly no Engineering objection to using the existing stock.

On the lights, the part number did not change (still D4638-1) even though the supplier did, so this is not a deviation. Both the Bruce p/n and Emteq p/n are acceptable.

On the vents, the part number changed from D4652-1 to D4652-5 because the appearance of the part was quite different, so all drawings now call up D4652-5. Suggest we get Roberto to issue a DEO that allows the D4652-1 to be used in place of D4652-5 until stock is depleted.

In both cases, we should set aside a portion of the old stock to support customers who already have the kits. Maybe 10 of the lights and 30 of the vents, or something like that.

Regards,
David

From: Nigel Forbes
Sent: May-14-15 8:31 AM
To: David Shepherd; Bill Beckett
Cc: Roberto Fuentes; Linda Lacelle; Mario Poulin; Daryl Leger; Harvey Siemens
Subject: RE: 139 Ceilings Deviation

David,

Apologies for the delay in replying. After reviewing the history on these items, here's the background:

- The lights, long lead time (90+ days) and minimum quantities to get them at \$765 a piece. Plus, these had to be shipped to Mr. Rowe to incorporate in the harnesses and that added to the lead time. So again, we placed blanket P.O based on forecast and we ended up with the these quantities and we can't return them. See below.

From: Shonda Wallace/ATL/Satair <sow@satair.com>
Date: May 14, 2015 at 10:09:59 AM EDT
To: Linda Lacelle <llacelle@dartaero.com>
Subject: RE: BR9741-401-001

Linda,

Unfortunately we do not buy parts back.

Best regards,

Shonda Wallace
Customer Order Specialist

Tel: +1 404 675 6328